

U.S. Environmental Protection Agency

Superfund Risk Assessment

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Provisional Peer-Reviewed Toxicity Values (PPRTVs) Database

Office of Superfund Remediation and Technology Innovation U.S. Environmental Protection Agency Washington, DC 20460

DISCLAIMERS

This document has been prepared by the U.S. Environmental Protection Agency (EPA)/Office of Superfund Remediation and Technology Innovation (OSRTI or Superfund). The toxicity values presented in this database were developed and externally reviewed in accordance with current Agency guidance on deriving human health toxicity values for EPA's Superfund Program. This database will be periodically updated with current values; therefore, users should ensure that the values are current at the time of use.

In addition, these assessments are prepared for use at Superfund sites. Parties considering using these assessments in other programs outside of the programs implemented or overseen by EPA's Office of Solid Waste and Emergency Response (OSWER) should not assume that EPA resources would be used to defend their use of these assessments or values.

INTRODUCTION

The Provisional Peer-Reviewed Toxicity Values (PPRTVs) currently represent the second tier of human health toxicity values for the EPA Superfund and Resource Conservation and Recovery Act (RCRA) hazardous waste programs. See a more complete discussion of the hierarchy below. Both the Superfund and RCRA programs accept the primacy of human health toxicity values contained in EPA's Integrated Risk Information System (IRIS). Values placed on IRIS have undergone external peer review and Agency consensus review. The toxicity values in this database (PPRTVs) have been developed specifically for EPA's Superfund program and have not undergone the multi-program review and consensus required for toxicity values to be placed in IRIS. However, some PPRTVs may be submitted for multi-program review as candidates for the IRIS database.

The EPA Superfund program is making the PPRTV Database available on the internet on a trial basis and is interested in feedback and input from our Regional Offices and stakeholders about the utility of this database to toxicologists and risk assessors and other scientists who prepare risk assessment on Superfund sites. If you have recommendations or comments on how the database is set up or

whether it is useful to have the PPRTV database on the internet, we would appreciate your input and feedback. If you have questions about a particular assessment, or if you have additional information you believe would be relevant to this assessment, please contact either of the following.

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BACKGROUND / HIERARCHY OF HUMAN HEALTH TOXICITY VALUE SOURCES

On December 5, 2003 the EPA Office of Superfund Remediation and Technology Innovation (OSRTI) revised its hierarchy of human health toxicity values for Superfund risk assessments, establishing the following three tiers as the new hierarchy.

- IRIS
- Provisional Peer-Reviewed Toxicity Values (PPRTVs)
- Other (Peer Reviewed) Values, including
 - o ATSDR's Minimal Risk Levels
 - o California Environmental Protection Agency (CalEPA) values
 - o HEAST

PURPOSE OF PPRTVs

PPRTVs are developed for use in the EPA Superfund Program. Requests to try and derive a PPRTV are generally filtered through the EPA Regional Superfund Program, in which the site subject to the request is located. However, Regions typically request PPRTVs regardless of what party is considered the lead agency or is funding response actions on the (Superfund) site, including Fundlead sites, potential responsible party (PRP) lead sites, State-lead sites, and sites where other Federal agencies may be identified as the lead agency.

DEFINITION OF A PPRTV

A PPRTV is a toxicity value derived for use in the Superfund Program when such value is not available in EPA's Integrated Risk Information System (IRIS, the first tier in the Superfund hierarchy of human health toxicity values). PPRTVs are derived after a review of the relevant scientific literature using the methods, sources of data and guidance for value derivation used by the EPA IRIS Program. All provisional toxicity values receive internal review by two EPA scientists and external peer review by at least two scientific experts. A third scientific review is performed if there is a conflict between the two original external reviewers. PPRTVs differ in part from IRIS values in that PPRTVs do not receive the multi-program consensus review provided for IRIS values. This is because IRIS values are generally intended to be used in all EPA programs, while PPRTVs are developed specifically for the Superfund Program.

Because the science and available information evolve, PPRTVs are initially derived with a three year life-cycle. However, Regions (or the EPA HQ Superfund Program) sometimes request that a PPRTV, which is used frequently, be reassessed and kept in the PPRTV database. In general, the need for a PPRTV is eliminated once an analogous IRIS value becomes available. Once IRIS values become available, PPRTVs are generally removed from the PPRTV database. It should also be noted that sometimes available information is not sufficient to derive a PPRTV. Some PPRTV Derivation Support Documents conclude that a PPRTV cannot be derived based upon the available information.

DEVELOPMENT AND ORGANIZATION OF THE PPRTV DATABASE

Staff in regional Superfund and RCRA program offices are advised to carefully review the information